

IAEA Revision Proposal for the Final Report of Handling ALPS-Treated Water at TEPCO's Fukushima Daiichi Nuclear Power Station

1 June 2023

The IAEA finished the Draft Final Report of Handling ALPS (Advanced Liquid Processing System) Treated Water at TEPCO's Fukushima Daiichi Nuclear Power Station (FDNPS) on 19 May. The conclusion points to a favourable finding for the discharge of ALPS Treated Water in this summer, even though activity concentrations of some radionuclides above the discharge limits are reported. Considering the public's captiousness, reliability of TEPCO and GOJ's capability for undertaking the safe discharge of ALPS treated water will be explained in the final report.

After IAEA's consultation with the Government of Japan (GOJ), data and results that could be viewed negatively by the public should be removed. After approval from the Director General Rafael Mariano Grossi, the final report will be issued in later June.

Final Conclusions and Findings

The report includes Introduction, Safety Principles, IAEA Safety Guides and References. Based on the instruction from the Director General Grossi, who had negotiated with GOJ before, positive conclusion supporting ALPS treated water discharging shall be included in the Executive Summary. The Final report will highlight that TEPCO's discharge plan is in accordance with International Safety Standards to address public concerns and doubts. The IAEA will conduct discussion with all Task Force experts, but their recommendations will not be reflected in the report.

Opinions from TEPCO and relevant Japanese authorities

Gustavo Caruso, Director and Coordinator for the ALPS Safety Review, and Erik Freeman, Programme Officer of the IAEA department of Nuclear Safety and Security visited Japan on 22 May and provided the draft of the final report to GOJ. The IAEA will make revisions considering the feedback from high-level officials of Ministry of Economy, Trade and Industry (METI), Ministry of Foreign Affairs of Japan (MOFA), Ministry of the Environment (MOE) and TEPCO. TEPCO and relevant Japanese authorities expressed concerns regarding the potential public opposition to some data and results. The IAEA fully understands these concerns and would make revisions.

- GOJ recommended to mention the IAEA's International Safety Standards were approved by 176 countries in the report, and the IAEA agreed to highlight the fact that handling of ALPS Treated Water and the IAEA ALPS Safety Review are in compliance with the International Safety Standards.
- Pacific Island Forum (PIF) required full analyses of ALPS treated water in all tanks, and neighbouring countries raised questions on organically bound tritium (OBT) detection. Considering GOJ required to fudge related issues in the report, hence above concerns were not included in the ALPS safety review.
- Some Task Force experts raised questions about standards applied to the safety review of FDNPS reactors and ordinary reactors. GOJ recommend IAEA to indicate that they adopted the same standards.
- GOJ had concerns with discrepancies between laboratories, and it recommended to
 adjust the criteria. The IAEA sets 1% as the respective regulatory limits for all
 radionuclides to avoid negative views of the public to the largest extent. Also, the
 IAEA makes it clear that significant discrepancies would not affect the later
 discharge of ALPS treated water because it was for the GOJ to make the decision.
- GOJ recommended to stress the fact that Japanese authorities never interfered with IAEA's safety review. The independence of the report is guaranteed as no political elements involved.

Notional Plan for Source and Environmental Monitoring Associated with IAEA ALPS Safety Review

The IAEA provided Notional Plan for Source and Environmental Monitoring Associated with IAEA ALPS Safety Review to GOJ in March 2023. The IAEA proposed a twofold approach for source monitoring based on "rapid" analyses of all batches and "full" analyses of selected batches. Rapid analyses would be carried out by Agency laboratories only, and the participation of multiple third-party laboratories is foreseen for full analyses. In this context, the IAEA is conducting rapid analyses for less time required, but the twofold approach will not be included in the report due to the concerns of TEPCO and relevant Japanese authorities.

Additional Budget

Environmental monitoring under the ALPS safety review is time-consuming and of great difficulty. Therefore, Additional budget of one million euros should be provided by GOJ since 850 000 euros provided before has been used up. Japanese authorities hold a negative attitude towards this request, and the IAEA noted that it would issue the final report and conduct monitoring after GOJ's approval and disbursement of the additional budget.

